

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

INGRASSIA, Vincent, B.
Motorola, Inc.
Intellectual Property Dept.
AZ 11/56-238
3102 North 56th Street
Phoenix, AZ 85018
ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 25 January 2002 (25.01.02)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference IRI05277	
International application No. PCT/US00/17501	International filing date (day/month/year) 26 June 2000 (26.06.00)

1. The following indications appeared on record concerning:		
<input type="checkbox"/> the applicant	<input type="checkbox"/> the inventor	<input checked="" type="checkbox"/> the agent
<input type="checkbox"/> the common representative		
Name and Address INGRASSIA, Vincent, B. Motorola, Inc. P.O. Box 10219 Scottsdale, AZ 85271-0219 United States of America	State of Nationality	State of Residence
	Telephone No. 480/441-4141	
	Facsimile No. 480/441-5220	
	Teleprinter No.	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:		
<input type="checkbox"/> the person	<input type="checkbox"/> the name	<input checked="" type="checkbox"/> the address
<input type="checkbox"/> the nationality		
<input type="checkbox"/> the residence		
Name and Address INGRASSIA, Vincent, B. Motorola, Inc. Intellectual Property Dept. AZ 11/56-238 3102 North 56th Street Phoenix, AZ 85018 United States of America	State of Nationality	State of Residence
	Telephone No. (602) 952-4399	
	Facsimile No. (602) 952-4376	
	Teleprinter No.	
3. Further observations, if necessary:		
4. A copy of this notification has been sent to:		
<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned	
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned	
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:	

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer François BAECHELER
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
 US Department of Commerce
 United States Patent and Trademark
 Office, PCT
 2011 South Clark Place Room
 CP2/5C24
 Arlington, VA 22202
 ETATS-UNIS D'AMERIQUE
 in its capacity as elected Office

Date of mailing (day/month/year) 16 July 2001 (16.07.01)	
International application No. PCT/US00/17501	Applicant's or agent's file reference IRI05277
International filing date (day/month/year) 26 June 2000 (26.06.00)	Priority date (day/month/year) 13 September 1999 (13.09.99)
Applicant OXLEY, Derek, Alan et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

11 April 2001 (11.04.01)

☐ in a notice effecting later election filed with the International Bureau on:
2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Odile ALIU Telephone No.: (41-22) 338.83.38
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REC'D 26 FEB 2002

WIPO

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

8

Applicant's or agent's file reference IRI05277	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/17501	International filing date (day/month/year) 26 June 2000 (26.06.2000)	Priority date (day/month/year) 13 September 1999 (13.09.1999)
International Patent Classification (IPC) or national classification and IPC IPC(7): H04Q 7/20, 7/36 and US Cl.: 455/ 431, 427, 428, 429, 430, 11.1, 12.1, 13.1, 13.2, 13.3; 342/354, 154, 157, 81		
Applicant MOTOROLA INC.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>13</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>4</u> sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 11 April 2001 (11.04.2001)	Date of completion of this report 29 January 2002 (29.01.2002)	
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Keith Ferguson <i>Karen A. Ward</i> Telephone No. (703) 305-4888	

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed.
- ☒ the description:
pages 1-13 as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.
- ☒ the claims:
pages NONE, as originally filed
pages NONE, as amended (together with any statement) under Article 19
pages NONE, filed with the demand
pages 17-20, filed with the letter of 31 December 2001.
- ☒ the drawings:
pages 1-5, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.
- ☐ the sequence listing part of the description:
pages NONE, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims <u>1-20</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>1-20</u>	YES
	Claims <u>NONE</u>	NO
Industrial Applicability (IA)	Claims <u>1-20</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1-5 meets the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a communications apparatus comprising: a plurality of base transceiver stations, each having a control channel associated therewith; and a non-terrestrial repeater having a first antenna to receive information from the plurality of base transceiver stations and a second antenna to project a beam on the earth; wherein the beam includes the control channel from each of the plurality of base transceiver stations and each of the control channels has an access channel associated therewith, and wherein each of the control channels is assigned a list of access classes that are modified to influence a relative loading between access channels.

Claims 6-9 meets the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a communications apparatus comprising: a plurality of base transceiver stations, each having a control channel associated therewith; and a non-terrestrial repeater having a first antenna to receive information from the plurality of base transceiver stations and a second antenna to project a beam on the earth; wherein the beam includes the control channel from each of the plurality of base transceiver stations and each of the control channels has a receive time window and a time offset associated therewith, a time location of the receive time window being a function of the time offset, such that the receive time window defines an area within the beam from which an associated base transceiver station receives communications.

Claims 10-14 meets the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest in a communications system having a plurality of control channels projected in a single beam, a method of influencing relative loading on a plurality of access channels in the single beam comprising: performing access assignments to each of the plurality of control channels; and modifying the access class assignment to influence loading on the plurality of access channels.

Claims 15-20 meets the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest in a communications system having a plurality of base transceiver stations, and a plurality of access channels in a single beam, a method of influencing relative loading on the plurality of base transceiver stations comprising assigning a different time offset to each of the plurality of base transceiver stations, wherein the different time offset for each of the plurality of base transceiver stations defines a time location of a receive time window within which the corresponding base transceiver station monitors the plurality of access channels.

----- NEW CITATIONS -----

US 5,790,939 A (MALCOLM et al.) 04 August 1998, see whole document.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference IRI05277	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 00/ 17501	International filing date (day/month/year) 26/06/2000	(Earliest) Priority Date (day/month/year) 13/09/1999
Applicant MOTOROLA INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of Invention is lacking** (see Box II).

4. With regard to the title,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

- ☒ as suggested by the applicant.
- ☐ because the applicant failed to suggest a figure.
- ☐ because this figure better characterizes the invention.

1&2

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

T/US 00/17501

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04Q7/38 H04Q7/30 H04B7/185 H01Q1/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04Q H04B H01Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 99 23769 A (RAYTHEON) 14 May 1999 (1999-05-14) page 2, line 31 -page 5, line 20 page 12, line 26 -page 14, line 23 page 17, line 10 -page 20, line 7; figures 1-8	1, 11, 16
Y	WO 97 19525 A (MOTOROLA) 29 May 1997 (1997-05-29) page 4 -page 15; figures 1-6	1, 11
Y	US 5 774 790 A (DUPUY) 30 June 1998 (1998-06-30) abstract column 5, line 37 -column 8, line 17; figures 1-3	1, 16
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

31 October 2000

Date of mailing of the international search report

08/11/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
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Authorized officer

Angrabeit, F

INTERNATIONAL SEARCH REPORT

International Application No

T/US 00/17501

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 837 567 A (BOEING) 22 April 1998 (1998-04-22) page 8, line 48 -page 12, line 40; figures 4-19 ----	1-21
A	US 2 626 348 A (NOBLES) 20 January 1953 (1953-01-20) the whole document ----	1, 11, 16
A	PATENT ABSTRACTS OF JAPAN vol. 015, no. 295 (E-1094), 26 July 1991 (1991-07-26) -& JP 03 104426 A (HITOMI SHIMADA; OTHERS: 01), 1 May 1991 (1991-05-01) abstract ----	1, 11, 16
A	WO 95 04407 A (INTERNATIONAL MULTI-MEDIA) 9 February 1995 (1995-02-09) page 15, line 19 -page 18, line 14; figures 1-7B ----	1, 11, 16
A	US 2 598 064 A (LINDENBLAD) 27 May 1952 (1952-05-27) column 4, line 45 -column 6, line 12; figures 1, 2 ----	1, 11, 16
A	WO 98 44639 A (NOKIA) 8 October 1998 (1998-10-08) abstract; figures 1-4 ----	1, 11, 16
A	EP 0 939 569 A (ICO SERVICES) 1 September 1999 (1999-09-01) abstract; figures 1-5 -----	1, 11, 16

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

T/US 00/17501

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9923769	A	14-05-1999	US 6061562 A AU 1079399 A EP 1027775 A	09-05-2000 24-05-1999 16-08-2000
WO 9719525	A	29-05-1997	US 5729542 A EP 0804834 A	17-03-1998 05-11-1997
US 5774790	A	30-06-1998	FR 2708813 A AU 689108 B AU 6748794 A CA 2128809 A EP 0637180 A FI 943535 A	10-02-1995 26-03-1998 09-02-1995 31-01-1995 01-02-1995 31-01-1995
EP 837567	A	22-04-1998	US 6018659 A JP 10150401 A	25-01-2000 02-06-1998
US 2626348	A	20-01-1953	NONE	
JP 03104426	A	01-05-1991	NONE	
WO 9504407	A	09-02-1995	AT 185659 T AU 685149 B AU 7365494 A BR 9407157 A CA 2168353 A CN 1132008 A DE 4495639 T DE 69421184 D DE 69421184 T EP 0711476 A ES 2113814 A ES 2141244 T FR 2712128 A GB 2296634 A,B GR 3032336 T IT RM940510 A JP 9503892 T PL 313220 A PT 711476 T	15-10-1999 15-01-1998 28-02-1995 17-09-1996 09-02-1995 25-09-1996 31-10-1996 18-11-1999 24-08-2000 15-05-1996 01-05-1998 16-03-2000 12-05-1995 03-07-1996 27-04-2000 30-01-1995 15-04-1997 10-06-1996 28-04-2000
US 2598064	A	27-05-1952	NONE	
WO 9844639	A	08-10-1998	FI 971320 A FI 971537 A AU 6732398 A CN 1220788 A CN 1220788 T EP 0935894 A ZA 9802553 A	28-09-1998 27-09-1998 22-10-1998 23-06-1999 23-06-1999 18-08-1999 01-10-1998
EP 939569	A	01-09-1999	JP 11317978 A	16-11-1999